Claims

1.   A method of operating a printer of the kind comprising a print head having an array of dot printing elements

5   extending in a first direction relative to a page to be printed and which prints at least a part of the page during relative movement between the print head and page in a second direction at an angle to the first direction, the method comprising performing the following steps:

10   (A)   prior to a print job:

(a)   identifying portions of the array of printing elements which will be needed at least for a first pass of the print head relative to the first page of the print job, and

15   (b)   servicing printing elements according to the array portions identified in step (a) so that one or more printing elements outside the identified array portions are not serviced, and

20   (B)   printing the at least first pass.

2.   A method as claimed in claim 1, wherein substantially all the printing elements outside the identified array portions are not serviced.

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3.   The method claimed in claim 1 or 2, wherein each array portion identified in step (a) comprises at least one group capable of printing a respective row of halftone values at a given resolution on the page with redundancy among the

30   elements of the group.

4.   The method claimed in claim 3, wherein step (b) comprises:

(b1) for at least some of the groups, reducing the
number of elements in the group available for use,
and

(b2) servicing only the printing elements remaining
5   available for use after step (b1).

5.   The method claimed in claim 4, wherein reducing the
number of elements in the group according to step (b1)
retains redundancy within the group.
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6.   The method claimed in claim 5, wherein step (b1)
excludes faulty printing elements from the group as
identified by a faulty print head database.

15   7.   The method claimed in claim 1, wherein the array of
printing elements extends substantially fully across the
page in the first direction.

8.   The method claimed in claim 1, wherein the at least
20   first pass is the only pass so that the first page is
printed in a single pass.

9.   The method claimed in claim 8, wherein the print job
comprises lines of text extending across the page
25   substantially parallel to the second direction.

10.   The method claimed in claim 1, wherein the printer is
an inkjet printer and the dot printing elements are inkjet
nozzles.
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11.   An incremental printer comprising a plurality of
printing elements arranged to print different portions of an
image, the printer being arranged, prior to printing an
image, to identify elements that are not required for

printing the image and to implement an element servicing routine, the printer being arranged to exclude one or more of the identified elements from the servicing routine.

5   12.   An incremental printer according to claim 11, wherein the elements are each arranged to print image content disposed along a respective row or column of the image, those elements having a position in the printer corresponding to a row or column in the image which is to
10   remain unprinted being excluded from the servicing routine.

13.   An incremental printer according to claim 11 or claim 12, wherein the elements are arranged in redundant groups, the elements in a given group being arranged to print image
15   content in a common range of image positions, the printer being further arranged to designate one or more, but less than all, of the elements in one or more of the groups as being available for printing the image and to service substantially only the designated elements of those groups
20   prior to printing the image.

14.   An incremental printer according to claim 13, wherein one or more of those groups in which elements are designated as being available for printing the image retains printing
25   redundancy.

15.   An incremental printer according to claim 13, wherein the printer is arranged to designate substantially only those elements which are not identified as faulty.
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16.   An incremental printer according to claim 11, wherein the printing elements are arranged in a page wide or page high array.

17. An incremental printer according to claim 11, wherein the printer is an inkjet printer and the dot printing elements are inkjet nozzles.

5   18. A printer control circuit adapted to control a plurality of printing elements, the elements arranged to print different portions of an image, the circuit being arranged to identify elements that are not required for printing a given image and to implement an print element
10 servicing routine prior to causing the image to be printed, the circuit being arranged to exclude one or more of the identified elements from the servicing routine.

19. A computer readable medium containing program
15 instructions which, when executed by a suitable data processing device associated with suitable hardware are adapted to perform the method claimed in any one of claims 1 to 10.